

**AMENDMENTS TO THE CLAIMS**

1. (currently amended) An NROM memory transistor comprising:
  - a substrate having a plurality of source/drain regions, the source/drain regions having a different conductivity type than the remainder of the substrate;
  - a nanolaminate, high permittivity (high-k), oxidized metal gate dielectric ~~formed by an oxidation of metal~~ overlying the substrate, the gate dielectric having a dielectric constant greater than a dielectric constant of silicon dioxide; and
  - a control gate formed on top of the gate dielectric.
2. (original) The transistor of claim 1 wherein the gate dielectric is a composite oxide – high-k dielectric – oxide nanolaminate gate insulator wherein the high-k dielectric is a charge trapping layer formed by low temperature oxidation of metal.
3. (canceled)
4. (original) The transistor of claim 1 wherein the transistor is used in either a NOR-type flash memory structure or a NAND-type flash memory structure.
5. (original) The transistor of claim 2 wherein the charge trapping layer is comprised of a material that has a lower conduction band edge than silicon nitride.
6. (original) The transistor of claim 2 wherein the gate dielectric has a larger energy barrier between the high-k dielectric and the oxide insulator than silicon dioxide.
7. (original) The transistor of claim 1 wherein the gate dielectric is comprised of one of the following structures: oxide – oxidized Hf – oxide, oxide – oxidized Zr – oxide, or oxide – oxidized Al – oxide.
- 8 – 37 (canceled)

**RESPONSE TO NON-FINAL OFFICE ACTION**

**PAGE 3**

Serial No. 10/808,059

Attorney Docket No. 400.285US01

Title: NROM MEMORY DEVICE WITH HIGH-PERMITTIVITY GATE DIELECTRIC FORMED BY THE  
LOW TEMPERATURE OXIDIZATION OF METALS

---

48. (canceled)